

DEPARTMENT OF ENVIRONMENT, GREAT LAKES, AND ENERGY◆ WATER RESOURCES DIVISION Michigan.gov/Wetlands

Restoration and Follow-Up of Utility Corridor Projects in Accordance with Part 303, Wetlands Protection, of the Natural Resources and Environmental Protection Act, 1994 PA 451, as amended (NREPA)

After any project construction it is important to restore the site and complete follow-up activities to ensure it is properly closed out, including removal of all waste products and debris. Proper decontamination and cleaning of equipment and materials should occur prior to leaving the site at the designated staging area (See *Suggested BMPs for Utility Corridor Projects that Cross Wetlands*). However, some utility activities may require more than just clean up. Sometimes unintentional or unavoidable damage may have occurred during the construction or maintenance activities. Knowing when and how to repair damaged areas is important in doing it properly since sometimes trying to repair damage could result in more damage. Table 1 details various damage issues that may occur with construction activities and how to restore it.

Table 1. When and how to restore areas disturbed by maintenance activities.

| Issue | Re-grade (by hand if possible) | Apply Mulch | Apply Native Seed | Inspect | Maintain |
|-------------------------|--------------------------------------|----------------|----------------------|---------|----------|
| Ruts <8" | yes | no | no | no | no |
| Ruts >8" | yes | yes | no | no | no |
| Exposed Soil in Wetland | yes | yes | yes | yes | yes |
| Exposed Soil in Upland | yes | yes | no | yes | no |
| Fill or Dredge | yes | yes | yes | yes | yes |

During directional drilling operations if a leak of drilling mud material into surface waters occurs, the project shall be immediately stopped, evaluated, and appropriate measures should be taken to alleviate the release and contain the leaking material. In general, the leaked material should be immediately isolated, contained, and restored to previous conditions.

When restoring any disturbed area, the following should be taken into account:

- · Avoid using machinery and restore by hand if possible.
- Small areas will likely vegetate on their own and may not need additional seed if there is not a large invasive species presence.
- · Always use a temporary seed such as annual rye to immediately stabilize the area
- Larger areas may require seeding with native seed appropriate for the resource (consultation with knowledgeable staff should occur).
- Do not use fertilizer or lime, and only use certified weed-free mulch.

Potentially Erosive Areas

If areas remain that are suspected of becoming eroded after restoration of the site is complete, further steps must be taken to ensure a future problem is not created:

- Conduct inspections of restored disturbed areas that contain a potential for eroding after every significant rain event until fully stabilized.
- Keep logs of stabilization
- Any discharge to a wetland or waterbody needs to be immediately addressed with corrective actions as approved by the Michigan Department of Environment, Great Lakes, and Energy (EGLE) in regulated features.

Follow-up

After the work is done and restoration complete, fully document the actions taken during construction and make a plan for future maintenance work. At a minimum the following should be kept in a file for each work location and referred to prior to future work:

- Map and make notes on known locations of wetlands, invasive species, and other notable features, especially any that were not originally mapped.
- Note any earth disturbance that occurred and ways that may be prevented in the future
- Note restoration work and any follow-up activities that may be required with a timeline
- Track extent of each invasive species area annually
- Create a control plan to treat spreading areas as part of regular maintenance

Compensation for Lost Wetland Functions and Temporary vs. Permanent Impacts

When activities do not meet the exemption criteria (See Utility Exemptions FAQ), then additional compensation may be required for construction activities that unavoidably result in the loss of wetland functions. This is referred to as wetland mitigation. These lost functions can result from both temporary and permanent impacts. Part 303 regulates the filling, dredging, draining of surface water, and constructing or maintaining a use in a wetland regardless of whether the impacts are temporary or permanent. Utility corridor projects may involve a variety of wetland impacts including permanent impacts (e.g., fill, structures, pads for towers), temporary impacts (e.g., dredging and filling for underground utility installation, construction staging areas), and maintained uses.

Given the complexity and variety of utility corridor projects, each project is dealt with on a project specific basis. The amount of wetland impacted, type and quality of wetland, the duration of impact, and the maintenance schedule is all considered in determining the appropriate mitigation required for each project.

Temporary impacts typically involve short duration impacts to wetlands to accommodate construction of a project. Examples of temporary impacts from utility projects are dredging and filling for underground installation, placement of construction mats in wetland that disturb the soil, placing temporary fill for construction access, etc. Temporary matting placed for a short duration (one construction season) for utility projects that does not disturb the soil (i.e., does not have dredge or fill) does not require a permit.

Temporary impacts may or may not require mitigation depending on the duration and significance of the impacts. In a lot of cases, mitigation for temporary impacts may not be necessary. Factors such as quality of the resources, likelihood of restoring the resource, and duration of temporary impact should be considered before determining if and how much mitigation will be required. Mitigation may not need to be required for temporary impacts if the area can be restored quickly to the previous condition after construction (e.g., emergent wetland areas). However, if the area will take a long time to be restored to previous condition (e.g., mature forested areas), mitigation may be needed for the loss of function (i.e., impact) during that time period (this is sometimes called temporal impacts or losses) but the mitigation

requirements may be reduced. In cases where the restoration is high risk, due to the rarity of the resource, type of disturbance, timeframe, or other reason, a more traditional amount of mitigation may be needed.

Temporary impacts may simply involve a one-time restoration, while others may require further maintenance and short-term monitoring, with conditions in place to ensure it is successfully restored. Either way, conditions on what is needed to restore the area are placed on the permit. In some cases, the temporary impact may not result in any additional action outside of construction clean-up, such as temporary impacts for placement of construction mats in a wetland that only displaced a small amount of soil from the mats. Other projects, such as clearing forested or scrub-shrub wetland for access, may require slightly more restoration effort including tree planting and monitoring, but might not require any mitigation up front. There may also be cases where mitigation may be needed for temporal losses as outlined above.

Utility projects often result in the maintained use of wetlands because they involve regular mowing or cutting of trees, shrubs, and other vegetation (e.g., on a regular basis, every year, every 3 years, etc.) and/or permanent conversion of wetlands of one type to another type (e.g., forested and scrub-shrub wetlands being permanently converted to emergent wetlands). Permanent conversions of forested and scrub-shrub wetlands to emergent wetlands and other significant wetland impacts from maintained uses and other activities in utility corridors require mitigation.

For permanent impacts from maintained uses, standard mitigation ratios should be applied (2:1 for forested, 1.5:1 for scrub-shrub, etc.) and specific factors of the project should be considered (type and quality of wetland, maintenance schedule, etc.). For example, mitigation credit may be given for wetlands that remain within the corridor if adequate wetland functions and values will remain after conversion and maintenance. The statute also allows EGLE to increase or decrease required mitigation by up to 20% or require the standard ratio with no adjustments depending on project specifics.

Visit Michigan.gov/Wetlands for more information on wetlands regulation in Michigan.